

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method of modulating a boom assembly to perform in a desired manner, wherein said boom assembly includes a boom and a stick, comprising the steps of:

~~receiving sending at least one a plurality of~~ lever signals ~~to by~~ a control device indicative of operator desired direction and desired velocity of said boom and said stick;

calibrating said ~~plurality of at least one~~ lever signals to provide ~~at least one of~~ a boom command signal and a stick command signal;

applying an algorithm to said ~~at least one of said~~ boom command signal and said stick command signal, wherein said algorithm uses command signal mapping; and

providing a modulating factor to said ~~control device boom~~ as a result of said algorithm, said modulating factor being a function of said boom command signal and said stick command signal and a subtraction factor, said subtraction factor being a function of said plurality of lever signals.

2. (Original) The method as set forth in claim 1, further including the step of adding said stick command signal to said boom command signal to provide a calculated signal.

3. (Original) The method as set forth in claim 2, wherein said command signal mapping includes:

mapping said boom command signal to provide a boom map output constant;

mapping said stick command signal to provide a stick map output constant;

and

mapping said calculated signal to provide a subtraction factor map output constant.

4. (Original) The method as set forth in claim 3, further including the step of multiplying said boom map output constant, said stick map output constant, and said subtraction factor map output constant to provide a final subtraction factor.

5. (Original) The method as set forth in claim 4, further including the step of subtracting said final subtraction factor from a full boom actuator signal to provide a pre-dampened modulating factor.

6. (Original) The method as set forth in claim 1, wherein said algorithm includes applying a rate limit control to control the rate at which said modulating factor could increase or decrease with respect to time.

7. (Currently Amended) The method as set forth in claim 1, further including the step of ~~the step of~~ applying said modulating factor to said boom command signal to modulate said boom movement.

8. (Currently Amended) A method of using a work machine, the work machine having a boom, a stick, and a work implement coupled to said the stick, each of said the boom and stick is controllable by at least one lever, comprising the steps of:

activating at least one lever for each of said boom and said stick to produce a plurality of command signals comprising at least ~~one of~~ a stick command signal and a boom command signal indicative of operator desired direction and desired velocity of said boom and said stick;

communicating said plurality of command signals to a control device;

using said control device to determine a modulating factor, said modulating factor being a function of said boom command signal and said stick command signal and a subtraction factor, said subtraction factor being a function of said plurality of command signals; and

using said control device to modulate one of said plurality of command signals in accordance with ~~a command signal mapping~~ said modulating factor such that said work implement travels along a desired path.

9. (Canceled)

10. (Canceled)

11. (Canceled)

12. (Original) The method as set forth in claim 8, wherein the step of using said control device includes causing said work implement to move along a linear path.

Please add new Claim 13 as follows:

13. (New) The method as set forth in claim 8, wherein the step of using said control device includes applying said modulating factor to said boom command signal to modulate said boom movement.